We thank Mie Inoue and Doris Mafat for their contribution of mortality data and Scott Bennett and Phil Schrodt for helpful suggestions. The boundaries shown in figure 2 do not imply the expression of any opinion by the WHO on the legal status of any territory or frontier.

Funding: We are supported by grants from the National Institute on Aging, National Institutes of Health (PO1 AG17625-02), and the Weatherhead Center for International Affairs at Harvard University.

Competing interests: None declared.

- 1 Ghobarah H, Huth P, Russett B. Civil wars kill and maim people-long after the shooting stops. (Draft 29 Aug 2001). Center for Basic Research in the Social Sciences. www.cbrss.harvard.edu/programs/hsecurity/ apers/civilwar.pdf (accessed 14 Jan 2002).
- Central and East European Law Initiative of the American Bar Association and the Science and Human Rights Program of the American Association for the Advancement of Science. *Political killings in Kosova/Kosovo, March-June 1999*. Washington, DC: ABA Central and East European Law Initiative, 2000.
- Hill K, Trussel T. Further developments in indirect mortality estimation. Popul Stud 1977;31:75-81.
- Chandramohan D, Mande G, Rodrigues L, Hayes R. Verbal autopsies for adult deaths: their development and validity in a multi-centre study. *Trop Med Int Health* 1998;3:436-46.
- Spiegel PB, Salama P. War and mortality in Kosovo, 1998-1999: an epidemiological testimony. Lancet 2000;355:2204.
- Seybolt TB. Major armed conflicts. In: SIPRI yearbook 2001: armaments, disarmament and international security. Oxford: Oxford University Press,
- $Armed \ conflict \ report\ 2001. \ Waterloo, Canada: Project Ploughshares, 2001. \ Singer JD, Small M. \ The \ wages \ of \ war, 1816-1965: a \ statistical \ handbook. \ New$
- York: John Wiley and Sons, 1972.
- Wallensteen P, Sollenberg M. Armed conflict, 1989-2000. J Peace Res 2001;38:629-44.
- 10 EM-DAT: The OFDA/CRED international disaster database. Brussels: Université Catholique de Louvain, 2001.
- 11 Marshall M. Measuring the societal impact of war. In: Hampson FO, Malone D, eds. From reaction to conflict prevention: opportunities for the UN ystem. Boulder, CO: Lynne Rienner, International Peace Academy,

- 12 Euroconference: identifying wars: systematic conflict research and its utility in conflict resolution and prevention, 2001, www.pcr.uu.se/ident.html (accessed 14 Jan 2002).
- 13 Bond J, Bond D, Silva J, Oh C. The VRA reader. Weston, MA: VRA Press, 1999. (www.vranet.com/products.html)
  14 King G, Lowe W. An automated information extraction tool for
- international conflict data with performance as good as human coders: a rare events evaluation design. 1 Nov 2001. http://gking.harvard.edu/files/infoex.pdf (Accessed 14 Jan 2002).
- 15 World Health Organization. World health report 2001. Geneva: WHO,
- 16 Levy BS, Sidel VW, eds. War and public health. New York: Oxford Univer-
- Siver Press, 1997.
   Sivard RL. World military and social expenditures, 1991. 14th ed. Washington, DC: World Priorities, 1991.
- 18 Coupland RM, Korver A. Injuries from antipersonnel mines: the experience of the International Committee of the Red Cross. BMJ 1991:303:1509-12.
- 19 Garfield RM, Frieden T, Vermund SH. Health-related outcomes of war in Nicaragua. Am J Public Health 1987;77:615-18.
- 20 Coupland RM, Meddings DR. Mortality associated with use of weapons in armed conflicts, wartime atrocities, and civilian mass shootings: literature review. BMJ 1999;319:407-10.
- 21 Murray CJL, Lopez AD. The global burden of disease. Cambridge, MA: Harvard University Press, 1996.
- 22 International Campaign to Ban Landmines. Landmine monitor report 2001: toward a mine-free world. New York: Human Rights Watch, 2001.
- 23 Stanton C, Abderrahim N, Hill K. An assessment of DHS maternal mortality indicators. Stud Fam Plann 2000;31:111-24.
- 24 Ustün TB, Chatterji S, Villanueva M, Bendib L, Sadana R, Valentine N, et al. WHO multi-country household survey study on health and responsiveness, 2000-2001. Geneva: WHO, 2001. (GPE discussion paper.)
- 25 Beck N, King G, Zeng L. Improving quantitative studies of international conflict: a conjecture. Am Political Sci Rev 2000;94:21.
- 26 Russett B. International relations. In: Kempf-Leonard K, ed. Encyclopedia of social measurement. San Diego: Academic Press (in press).
- 27 King G, Zeng L. Improving forecasts of state failure. World Polit 2001:53:623.
- 28 Valentino BA, Huth P, Balch-Lindsay D. "Draining the sea:" mass killing, genocide, and guerrilla warfare (31 Aug 2001). Center for Basic Research in the Social Sciences. www.cbrss.harvard.edu/programs/hsecurity/ papers/draining.pdf (accessed 14 Jan 2002).
- 29 King G, Murray CJL. Rethinking human security. *Political Sci Q* 2002.

### Children of war: the real casualties of the Afghan conflict

Zulfiqar Ahmed Bhutta

Ignorance, isolation, illness, violence, and social upheaval have produced a "lost generation"; failure to provide long term support for Afghanistan risks losing another

To many observers of the Afghan conflict, it seems as if the world suddenly discovered Afghanistan after 11 September 2001. Passing interest following the Soviet invasion in 1979 and the subsequent struggle of the Mujahideen against its occupation was soon replaced by war weariness and disinterest. The rise of the Taliban and their draconian policies made Afghanistan a pariah state. Events have moved quickly in recent months, with the US attack on Afghanistan, the defeat of the Taliban and the installation of an interim multiethnic government. However, few are fully aware of the plight of the main victims of this tragedy, the women and children of Afghanistan. Fewer still understand the genesis and significance of the Taliban movement and its relation to events in neighbouring Pakistan. This article explores the origin of the current Afghan crisis and describes the impact of a quarter of a century of incessant conflict on Afghan children.

### Impact of the Soviet invasion (1979-89)

The Soviet invasion of Afghanistan in 1979 and the subsequent brutal military campaign resulted in one of the biggest humanitarian crises of modern history, with over five million refugees fleeing to Pakistan and Iran

### **Summary points**

The rise of the Taliban and the genesis of the current Afghan conflict was in no small measure due to global apathy to the plight of Afghanistan

The women and children of Afghanistan, both among refugees and resident populations, have paid a disproportionate price for this conflict

The rates of malnutrition, disease, and death among Afghan children rank among the highest in the world

In addition to the many injuries due to landmines and artillery, over 80% of Afghan children interviewed reveal some psychological scars of war

Women and children must be the prime focus of attention in rebuilding Afghanistan, through sustained efforts at improving health, nutrition, and education

University, Karachi, Pakistan Zulfiqar Ahmed Husein Lalji Dewraj professor of paediatrics zulfiqar.bhutta@

BMJ 2002;324:349-52



Fig 1 A 13 year old blast victim: Afghanistan has the highest rates of landmine injuries and deaths in the world

and another two million displaced internally.<sup>1</sup> The massive exodus of almost a quarter of the Afghan population, of which three quarters were women and children, was a consequence of several factors. These included fear of the Soviet occupying army and the pro-Soviet regime and widespread destruction of homes and livelihoods.<sup>2</sup> Today Afghanistan lies devastated as one of the poorest nations of the world. Average life expectancy is 46 years, and mortality among children, who represent almost 42% of its 26 million population, is extremely high.<sup>3</sup>

Most of the civilian and childhood casualties of the prolonged war in Afghanistan were the direct result of ballistic or landmine injuries. Compared with Bosnia, Cambodia, and Mozambique, Afghanistan had the highest population based rates of landmine injuries and the highest mortality. In a gruesome demonstration of specific targeting of children by the Soviets, many of the mines deployed were shaped as colourful toys or "butterflies." Despite attempts at demining, there were still close to 10-15 million mines in Afghanistan in 1993. Two years ago about 3-4% of the population of Afghanistan were estimated to be disabled, of whom only a minority had access to treatment. The situation is likely to be much worse now, in the wake of the recent conflict and continuing air strikes (fig 1).

Before the recent conflict, most of the five million Afghan refugees from the Soviet invasion were living in Pakistan and Iran, either in refugee camps or urban squatter settlements. Although high childhood morbidity and mortality among refugee populations are well recognised, a1993 survey of families in Kabul found that the daily mortality for children aged under 5 was 260/100 000 population compared with 190/100 000 among refugee families. This is plausible because, whereas refugees are a focus of international relief, resident populations are often left to fend for themselves.

There are few objective accounts of the conflict in Afghanistan and the proxy war fought between the West (mainly the United States) and the former Soviet Union through the Mujahideen.<sup>2 9</sup> Pakistan was then, as today, a frontline state and bore the brunt of the economic and social impact of the conflict. The rapid influx of over a million Afghan refugees in and around Peshawar alone altered the economic and social fabric of the city virtually overnight.<sup>10</sup> Although humanitarian aid poured in, much of the assistance was aimed at supporting the Mujahideen. A wide range of conventional weapons were introduced into Afghanistan, and their spillover into neighbouring Pakistan was cynically labelled as the growth of the "Kalashnikov culture."

### Aftermath of the Soviet withdrawal and civil war (1989-94)

By the time the Soviet Union withdrew from Afghanistan in 1989, it had suffered over 50 000 documented casualties. The local populace and the Mujahideen had, however, paid a terrible price in destruction, death, and disability. Magnus and Naby prophetically stated: "Truly this became a generation that sacrificed itself. A world that does not help to reconstruct their country and find meaning for their loss may pay the price in warriors for hire, which disrupts not only Afghan tranquillity but stability in many corners of the world."

Unfortunately, the development assistance and support offered for economic and social recovery to Afghanistan were negligible, and what followed was a sorry tale of societal breakdown, lawlessness, and internecine conflict. As always, the most vulnerable in Afghan society bore the brunt of the continuing conflict. A survey of Afghan refugee women and children in Quetta found that over 80% of children were unregistered and child mortality was 31% (112/366 births). Of those who survived, 67% were severely malnourished, with malnutrition increasing with age. These vulnerable populations remained entirely dependent on assistance from UN agencies and non-governmental organisations.

# Events in Pakistan: the growth of madrassahs and religious fanaticism

Events in Pakistan over the past two decades have formed an integral part of the Afghan tragedy. Much of the Afghan conflict occurred during the military dictatorship of General Zia ul Haq, which saw a massive influx of aid and an artificial period of prosperity and economic growth. Tragically, much of this was squandered by poor governance and widespread corruption. The development assistance programmes of the United States for Pakistan were greatly reduced in 1993 and completely stopped after Pakistan's nuclear tests in 1998. With dwindling external assistance and imposition of structural adjustment programmes, there was a marked increase in poverty.<sup>12</sup> The situation was made much worse by the imposition of economic sanctions by most Western countries in 1998. The major victims of these sanctions and economic stagnation were development programmes in education and health.13

Even before the economic decline, lack of state investment in education in Pakistan had fuelled the growth of madrassahs (religious schools largely run as seminaries and funded by private organisations). Their main attraction for poor families has been free education, clothing, and board for students. Although attempts at reform are under way, the curriculum in most madrassahs remains a blend of archaic theological and Islamic teaching. <sup>14</sup> In contrast with state spending on education, <sup>15</sup> the number of madrassahs has risen from nearly 2500 in 1980 to over 39 000. <sup>14 16</sup>

The madrassahs provided education to both local and refugee children. By 1990, enrolment in state sponsored primary education in Afghanistan had dropped to a third of pre-conflict figures,17 many started to send their children and orphans to madrassahs in Pakistan, particularly in the Northwest Frontier province. Diasporas of these graduates now span both sides of the Durand line, the relatively porous border between Afghanistan and Pakistan (fig 2). While only a minority of madrassahs impart militant training and preach jihad (religious war), those that do thrive on a dangerous blend of militancy, sectarian politics, and obscurantism. A steady stream of images of brutal suppression of Muslims in Palestine, Bosnia, Kosovo, Kashmir, and Chechnya have fuelled an entire generation of anti-Western angry young men.

## The impact of drought, sanctions, and the rise of the Taliban (1994-2001)

The Taliban (meaning "students") movement grew from the Afghan orphans or refugee children who attended the madrassahs of Baluchistan and the Northwest Frontier province of Pakistan. Their rapid rise to power in 1994 must be seen in the context of chaos and civil war in Afghanistan, with warlords running amok and complete breakdown of law and order. The small band of Taliban was first led by Mullah Umar against a local warlord in Spin-Boldak and led to the capture of Kandahar in November 1994, with scarcely a shot being fired. The subsequent rise and spread of the Taliban in Afghanistan surprised most observers, and was generally welcomed by a war weary and destitute population.

To the development agencies the Taliban government brought some respite from incessant conflict. However, their tribal and medieval interpretation of Islam led to the imposition of draconian policies restricting the rights of women and ethnic minorities. Their edicts on female education, dress code, and employment were largely based on an extremely orthodox misinterpretation of Islamic law, and a source of great distress to many in the Islamic world. In an ironic twist of fate, the Taliban era also saw Afghanistan suffer from one of the worst droughts of this century, which virtually wiped out many sectors of a largely agrarian economy. Despite plentiful evidence of the impact of economic sanctions on the most vulnerable in society, especially children,<sup>18</sup> Afghanistan was progressively deprived of assistance to the extent that even humanitarian agencies found it difficult to operate (P Bloomer, Oxfam, press release, December 2000).

Notwithstanding the hardship due to drought and sanctions, the Taliban policies brought disproportionate suffering and impoverishment to war widows and families in Afghanistan. Food shortages and malnutrition had their biggest impact on Afghan girl children. Less obvious are the psychological trauma and mental

stress experienced by Afghan women and children<sup>20</sup> and the impact of continued illegal conscription of child soldiers by all warring factions.

# The lasting legacy of war: a lost generation?

The lasting impact of war on the psychological state of women and children is well described. Any have post-traumatic stress as a consequence of witnessing or experiencing parental loss in war. Political repression and state terror have also been shown to result in significant psychological sequelae. Recently, a study of internally displaced children from the war in Bosnia showed that 94% had features of post-traumatic stress.

A landmark survey by Unicef on the effect of war on children aged 8-18 years in Kabul indicated that 41% had lost one or more parents because of the conflict, and over half had witnessed torture or violent death. Over 90% of the children interviewed expressed the fear of dying in the conflict. A particularly gruesome practice of encouraging children to witness public amputations and executions has an enormous impact on impressionable minds. Over 80% of the children interviewed felt they could not cope with events and that life was not worth living.

While such events can lead to considerable psychological trauma and distress, they may also inure a young mind to violence. The average Taliban and Northern Alliance soldiers are a product of the same cycle of violence and social upheaval experienced from early childhood. Ignorance, isolation, and a daily ritual of violence greatly temper their vision of the world. This "lost generation" is likely to breed many more unless action is taken to bring the cycle of violence to an end.

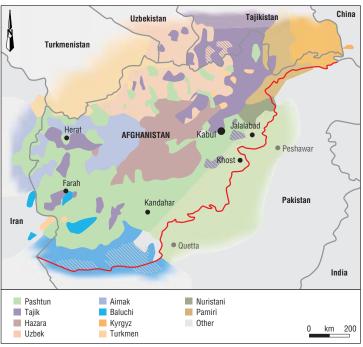


Fig 2 The border between Afghanistan and Pakistan artificially cuts through ethnic groups. The Taliban movement arose among Afghan children attending madrassahs in neighbouring Baluchistan and Northwest Frontier province of Afghanistan

#### Suggested further reading

- Griffin M. Reaping the whirlwind: the Taliban movement in Afghanistan. London: Pluto Press, 2001
- Rashid A. A vanished gender: women, children and Taliban culture. In: Taliban: Islam, oil and the new great game in Central Asia. London: Tauris, 2000:105-16
- Maksoud M, Dyregrov A, Raundalen M. Traumatic war experiences and their effects on children. In: Wilson J, Raphael B, eds. International handbook of traumatic stress syndromes. New York: Plenum Press,
- Toole MJ, Galson S, Brady W. Are war and public health compatible? Lancet 1993;341:1193-6
- Machel G. The impact of war on children. New York: Unicef, 2001
- Brett R, McCallin M. Children-the invisible soldiers. Stockholm: Rädda Barnen (Save the Children Sweden), 1996.
- Caroe O. The Pathans. Oxford: Oxford University Press, 1999 (first published 1958)
- Weiner M, Noman O. The child and the state in India and Pakistan: child labour and educational policies in comparative perspectives. Princeton NJ: Princeton University Press, 1991
- Khan SR. 50 years of Pakistan's economy: traditional topics and contemporary concerns. Karachi: Oxford, 1999
- Revolutionary Association of Women of Afghanistan (RAWA). www.rawa.org (accessed 14 Jan 2002)
- Afghan Women and Children. http:// homepage2.nifty.com/WATAN/index.html (accessed 14 Jan 2002)

### What lies ahead for Afghanistan?

Widespread public relief and rejoicing in the wake of the Taliban's defeat is tempered by the fear of renewed conflict between tenuous partners and the re-emergence of warlords. While the development and relief agencies assess options for a massive rehabilitation programme, a cruel winter continues to take its toll on women and children. The coalition against terrorism needs to rapidly become an effective coalition for rebuilding infrastructure, demining the country, and maintaining law and order. Immediate priorities must include reviving the largely defunct education and primary healthcare systems. The focus must remain on supporting the needs of women and children and the planned repatriation of millions of refugees still languishing in squalid camps. Aid programmes need to be complementary and based on solid foundations of political stability, forgiveness, and human development and must be matched by programmes supporting human and social development in Pakistan.

In a society as complex and fractious as Afghanistan, with the baggage that comes with a quarter of a century of conflict, this task will be neither short nor easy. It is, however, essential: to risk another "lost generation" would be a folly of colossal proportions.

Competing interests: None declared.

Miller LC, Timouri M, Wijnker J, Schaller JG. Afghan refugee children and mothers. Arch Pediatr Adolesc Med 1994;148:704-8.

- Magnus RH, Naby E. Afghanistan: mullah, Marx and mujahid. New Delhi: Harper Collins, 1998.
- Central Intelligence Agency. The world factbook 2001-Afghanistan. www.cia.gov/cia/publications/factbook/index.html (accessed
- Andersson N, da Sousa SP, Paredes S. Social cost of land mines in four countries: Afghanistan, Bosnia, Cambodia and Mozambique. BMJ 1995;311:718-21.
- United Nations Children's Fund. Anti-personnel land-mines: a scourge on
- children. New York: Unicef, 1994:6.
  Coleridge P. Disability in Afghanistan. Islamabad: UNDP/UNOPS Comprehensive Disabled Afghans' Programme, 1999.
- Rädda Barnen (Save the Children Sweden). A baseline study on the future of Save the Children Sweden in Afghanistan. Stockholm: Rädda Barnen, 1999.
- Gessner BD. Mortality rates, causes of death, and health status among displaced and resident populations of Kabul, Afghanistan. JAMA
- Yousaf M, Adkin M. The bear trap: Afghanistan's untold story. Lahore: Jang Publishers, 1992.

  10 Hussain SA. The flood of Afghan refugees hurts the local Peshawar
- population. In: Of home and country: journey of a native son. Toledo: Literary Circle of Toledo, 1998:184-7.
- 11 Sogan D, Bridel J, Shepherd C, Arzomand M, Southall DP. 21st century health care for children in Afghanistan? Pediatrics 1998;102:1193-8.
- 12 Bhutta ZA. Structural adjustments and impact on health and society: a perspective from Pakistan. Int J Epidemiol 2001;30:712-6.
- 13 Bhutta ZA. Staring into the abyss: walking the nuclear tightrope in south Asia: sanctions may hurt the people of India and Pakistan. BMJ 1998;317:363-4.
- 14 Nayyar AH. Madrassah education-frozen in time. In: Hoodbhoy P, ed.
- Education and the state: fifty years of Pakistan. Karachi: Oxford. 1998: 215-50.

  15 Ministry of Finance. Economic survey of Pakistan. 2000-2001. Islamabad: Government of Pakistan (www.finance.gov.pk/survey/main.html).
- 16 Friedman TL. In Pakistan, its Jihad 101. New York Times 13 Nov 2001.
   17 Ferogh AA. Current political and economic situation in Afghanistan. Afghanistan Studies Project for USAID. Islamabad: USAID Mission to Pakistan,
- 18 Ali MM, Shah IH. Sanctions and childhood mortality in Iraq. Lancet 2000;355:1851-7.
- 19 Global Movement for Children Afghanistan Working Group. Lost chances: the changing situation of children in Afghanistan 1999-2000. www.
- reliefweb.int/library/documents/2001/gmc-afg-30jun.pdf (June 2001).

  20 Rasekh Z, Bauer HM, Manos M, Iacopino V. Women's health and human rights in Afghanistan. *JAMA* 1998;280:449-55.
- Bryce JW, Walker N, Ghorayeb F, Kanj M. Life experiences, response styles and mental health among mothers and children in Beirut, Lebanon. Soc Sci Med 1989;28:685-95.
- 22 Locke CJ, Southwick K, McCloskey LA, Fernandez-Esquer ME. The psychological and medical sequelae of war in Central American refugee mothers and children. Arch Pediatr Adolesc Med 1996;150:822-8.
- Munczek DS, Tuber S. Political repression and its psychological effects on Honduran children. *Soc Sci Med* 1998;47:1699-713.
- 24 Lykes MB. Terror, silencing and children: international, multidisciplinary collaboration with Guatemalan Maya communities. Soc Sci Med 1994:38:543-52.
- 25 Goldstein RD, Wampler NS, Wise PH. War experiences and distress symptoms of Bosnian children. Pediatrics 1997;100:873-8.
- 26 Gupta L. Psychosocial assessment of children exposed to war related violence in Kabul. New York: Unicef, 1997.

#### *Endpiece*

### Why the Great War looks so innocent to modern eyes

"The war machine," concludes [Gil] Elliott, "rooted in law, organisation, production, movement, science, technical ingenuity, with its product of 6000 deaths a day over a period of 1500 days, was the permanent and realistic factor, impervious to fantasy, only slightly altered by human variation ....No human institution was sufficiently strong to resist the death machine." But the death machine had only sampled a vast new source of raw material: the civilians behind the lines. It had not yet evolved equipment efficient to process them, only big planes and clumsy biplane bombers. It had not yet evolved the necessary rationale that old people and women and children are combatants equally with armed and uniformed young men. That is why, despite its sickening squalor and brutality, the Great War looks so innocent to modern eyes.

Richard Rhodes in *The making of the atomic bomb* (1986), including a quote from Gil Elliot in Twentieth century book of the dead (1972)